

WE CLAIM AS OUR INVENTION:

1. An electronic device comprising:

a security region containing a plurality of security components;

a first battery disposed in said security region for supplying power to said security components;

a second battery disposed outside of said security region for serving as a back-up to said first battery;

a battery switchover device having a first input connected to said first battery and a second input connected to said second battery for switching power supply to said security components; and

a monitoring unit disposed in said security region and connected to said battery switchover device for evaluating voltage information associated with at least one of a voltage of said first battery and a voltage of said second battery.

2. An electronic device as claimed in claim 1 wherein said monitoring unit comprises an analog-to-digital converter for converting said voltage information into digital information.

3. An electronic device as claimed in claim 2 wherein said monitoring unit comprises a processor supplied with said digital information for evaluating said digital information to generate a signal indicating a supply status representative of said voltage information, and an externally visible indicator connected to said processor for receiving said status signal therefrom and for displaying a visual indication of said supply status.

4. An arrangement as claimed in claim 2 wherein said analog-to-digital converter has a first input and a second input, and wherein said battery switchover device has an output, and wherein said device further comprises a first series circuit of Schottky diodes connected between said first input of said battery switchover device and said output, and a second series circuit of Schottky diodes connected between said second input of said battery switchover device and said output, said first series circuit having a center tap connected to said first input of said analog-to-digital converter and said second series circuit having a center tap connected to said second input of said analog-to-digital converter.

5. An electronic device as claimed in claim 1 wherein said battery switchover device has an output connected to said security components for supplying power thereto via said battery switchover device from one of said first battery and said second battery, and wherein said device further comprises, in said security region, decoupling elements at said output.

6. An electronic device as claimed in claim 5 wherein said decoupling elements are selected from the group consisting of diodes and controlled electronic switches.

7. An electronic device as claimed in claim 1 further comprising a security module containing said monitoring unit and said security components.

8. An electronic device as claimed in claim 6 wherein said security module further comprises said battery switchover device.

9. An electronic device as claimed in claim 1 further comprising a battery compartment for said second battery, closeable with a battery compartment cover.

10. An electronic device as claimed in claim 1 wherein having a housing containing said security region and said battery compartment, and having a sidewall in which said battery compartment cover is disposed.

11. An electronic device as claimed in claim 1 wherein having a housing containing said security region and said battery compartment, and having a base in which said battery compartment cover is disposed.

12. An electronic device as claimed in claim 1 further comprising a plurality of operating components, and wherein said monitoring unit includes a processor for evaluating said voltage information, and wherein said processor is connected to at least one of said operating components and alters operation of said at least one of said operating components if said voltage information indicates an unperformed need to replace said second battery.

13. An electronic device as claimed in claim 12 wherein said processor prevents operation of said at least one operating component after a predetermined delay if said voltage information indicates an unperformed need to replace said second battery.